CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 12. (Canceled)

13. (Currently Amended) A system comprising:

a memory;

a memory controller to access the memory;

a first processor to parse received video data to generate a plurality of packets and provide the plurality of packets for storage in the memory, the first processor comprising a general purpose processor; [[and]]

a second processor ~~to access packets of the plurality of packets from the memory, the second processor including a video transcoder to transcode video data of the packets~~comprising a video transcoder; and

a decoder instruction packet (DIP) sequencer to:

access one or more packets of the plurality of packets from the memory via the memory controller;

configure the second processor based on opcodes of the one or more packets; and

provide the one or more packets to the second processor for transcoding.

14. (Canceled)

15. (Previously Presented) The system of claim 13, wherein the second processor further includes:

a data decompression portion;

a scalar; and

a data compression portion.

16. (Previously Presented) The system of claim 15, wherein the decompression portion includes a portion to perform a frequency domain to time domain transform.

17. (Previously Presented) The system of claim 16, wherein the frequency domain to time domain transform portion is a portion to perform an inverse discrete cosine transform portion.

18. (Original) The system of claim 16, wherein the decompression portion includes a portion to perform a de-quantization of data.

19. (Original) The system of claim 16, wherein the decompression portion includes a portion to perform a DeZigZag of data.

20. (Original) The system of claim 19, wherein the decompression portion includes a motion compensation portion.

21. (Original) The system of claim 16, wherein the decompression portion includes a motion compensation portion.

22. (Original) The system of claim 15, wherein the decompression portion includes a motion compensation portion.

23. (Original) The system of claim 22, wherein the compression portion includes a motion vector generator.

24. (Original) The system of claim 23, wherein the motion vector generator includes a buffered motion predictor.

25. (Previously Presented) The system of claim 24, wherein the compression portion further includes a portion to perform a time domain to frequency domain transform.

26. (Original) The system of claim 25, wherein the time domain to frequency domain transform portion includes a discrete cosine transform portion.

27. (Original) The system of claim 15, wherein the compression portion includes a motion vector generator.

28. (Original) The system of claim 25, wherein the motion vector generator includes a buffered motion predictor.

29. (Canceled)

30. (Canceled)

31. (Previously Presented) The method of claim 53, wherein the characteristic is a compression factor.

32. (Previously Presented) The method of claim 53, wherein the characteristic is a scale factor.

33. (Previously Presented) The method of claim 32, wherein transcoding the video data payloads comprises:

decompressing the video data payloads to generate a first intermediate data;

scaling the first intermediate data to generate a second intermediate data; and

compressing the second intermediate data to generate the representation of the second channel.

34. (Previously Presented) The method of claim 53, wherein transcoding the video data payloads comprises:

decompressing the video data payloads to generate a first intermediate data, wherein the first intermediate data is frequency domain data;

converting the first intermediate data to a second intermediate data, wherein the second intermediate data is time domain data having the characteristic represented by the first value;

converting the second intermediate data to a third intermediate data having the characteristic represented by the second value; and

compressing the third intermediate data to generate the representation of the second channel.

35. (Previously Presented) The method of claim 53, wherein receiving the one or more packets includes:

storing the video data payloads of the one or more packets in a first memory of the second processor; and

storing the information associated with the video data payloads in a second memory of the second processor.

36. (Previously Presented) The method of claim 35, wherein the first memory and the second memory comprise a same memory.

37. (Previously Presented) The method of claim 53, wherein the video data payloads are transcoded based at least in part on the information associated with the video data payloads.

38. (Previously Presented) The method of claim 37, wherein the information associated with a video data payload indicates that the video data payload includes one or more of video time stamp information, picture configuration information, slice information, macroblock information, motion vector information, quantizer matrix information, or specific picture location information.

39. (Previously Presented) The method of claim 53, wherein receiving the one or more packets and transcoding the video data payloads support a real-time play back of the representation of the second channel.

40. (Previously Presented) The method of claim 53, further comprising:

providing the representation of the second channel of compressed video data for reception by at least one multimedia device.

41. (Canceled)

42. (Canceled)

43. (Previously Presented) The method of claim 53, wherein the first data processor includes a general purpose processor and the second data processor includes a video processor.

44. (Currently Amended) A system comprising:

a memory;

a memory controller to access the memory;

a decoder instruction packet (DIP) sequencer to:

access from the memory via the memory controller one or more packets having a video data payload and information related to the video data payload from the memory, wherein the video data payloads of the one or more packets represent a first channel of compressed video data having a characteristic represented by a first value; and

configure a first processor based on opcodes of the one or more packets;

[[a]]the first data processor to transcode the video data payloads of the one or more packets to generate a representation of a second channel of compressed video data having the characteristic represented by a second value; and[[:]]

~~access one or more packets having a video data payload and information related to the video data payload from the memory, wherein the video data payloads of the one or more packets represent a first channel of compressed video data having a characteristic represented by a first value; and~~

~~transcode the video data payloads of the one or more packets to generate a representation of a second channel of compressed video data having the characteristic represented by a second value; and~~

a second data processor comprising a general purpose processor, the second data processor to:

receive a data stream including video data at a first data processor;

parse the data stream to identify video data associated with a first channel;

packetize the video data associated with the first channel to generate the one or more packets; and

provide the one or more packets for storage in the memory.

45. (Previously Presented) The system of claim 44, wherein the characteristic is a compression factor.

46. (Previously Presented) The system of claim 44, wherein the characteristic is a scale factor.

47. (Previously Presented) The system of claim 44, wherein the first data processor is further to:

decompress the video data payloads to generate a first intermediate data;

scale the first intermediate data to generate a second intermediate data; and

compress the second intermediate data to generate the representation of the second channel.

48. (Previously Presented) The system of claim 44, wherein the first processor is further to:

decompress the video data payloads to generate a first intermediate data, wherein the first intermediate data is frequency domain data;

convert the first intermediate data to a second intermediate data, wherein the second intermediate data is time domain data having the characteristic represented by the first value;

convert the second intermediate data to a third intermediate data having the characteristic represented by the second value; and

compress the third intermediate data to generate the representation of the second channel.

49. (Previously Presented) The system of claim 44, wherein the first processor transcodes the video data payloads based at least in part on the information associated with the video data payloads.

50. (Previously Presented) The system of claim 49, wherein the information associated with a video data payload indicates that the video data payload includes one or more of video time stamp information, picture configuration information, slice information, macroblock information, motion vector information, quantizer matrix information, or specific picture location information.

51. (Canceled)

52. (Previously Presented) The system of claim 44, wherein the first data processor comprises a video processor.

53. (Currently Amended) A method comprising:

receiving, at a first processor, a data stream including video data;

parsing, at the first processor, the data stream to identify video data associated with a first channel;

packetizing, at the first processor, the video data associated with the first channel to generate the one or more packets, each packet having a video data payload and information related to the video data payload, wherein the video data payloads of the one or more packets represent a first channel of compressed video data having a characteristic represented by a first value;

storing the one or more packets at a memory;

accessing~~, at a second processor,~~ the one or more packets from the memory via a decoder instruction packet (DIP) sequencer;

providing, from the DIP sequencer, the one or more packets to a second processor;

configuring, via the DIP sequencer, the second processor based on opcodes of the one or more packets; and

transcoding, at the second processor, the video data payloads of the one or more packets to generate a representation of a second channel of compressed video data having the characteristic represented by a second value.

54. (Previously Presented) The system of claim 13, wherein the first processor and the second processor are integrated at a same package substrate.